



# Compliance Risk Modeling and Resource Allocation in LMSB

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## Overview

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- LMSB Engaged in Major Effort to Improve Compliance Risk Measurement and Resource Allocation
  - Statistical Model of Compliance Risk
    - Estimates Extent to which LMSB Taxpayer Under- or Over-Reports Tax Liability on Current-Year Return
  - Resource Allocation Model
    - Transforms Compliance Risk Estimates into Resource Allocation Decision Designed to Achieve IRS Policy Objectives
  - Business and Information Systems Modernization
    - Considers Structure of Business Processes to Encourage Process of Improving and Refining Models



# Compliance Risk Model

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- Target Variable is Audit Results
  - Adjusted to Exclude Effects of Activities in Other Years
  - Does Not Consider Time Spent on Audit
- Structured Data-Mining Approach Using Extended Multi-Year Panel Data Set
  - Richer Information on Domestic and International Features of LMSB Taxpayers and Related Entities
  - Historical and Year-to-Year Change Information
  - Financial Statement and Book-Tax Differences
  - Work with Experts to Transform Raw Data into Issue-Specific Measures of Compliance Risk
- Provides Flexible Basis for Alternative Approaches to Resource Allocation



## Resource Allocation Model

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- Transforms Compliance Risk Estimates into Resource Allocation Decision Consistent with IRS Policy Goals
  - Mandatory Workload
  - Effect on Voluntary Compliance
  - Level of Aggressiveness
  - Certainty of Result
  - Effect on Revenue
    - Activities in Other Years (e.g., NOL and Excess Credit Carryovers)
    - Discount Rate
  - Expected Resource Costs and Constraints

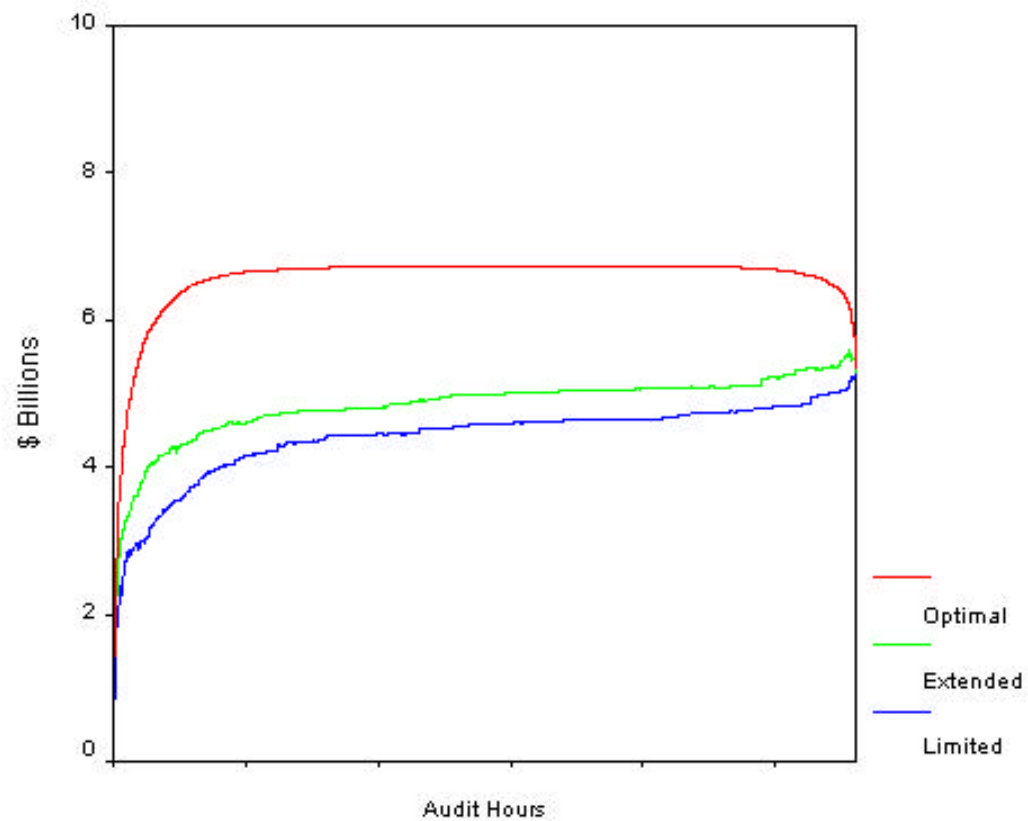


## Compliance Risk Model: Initial Results

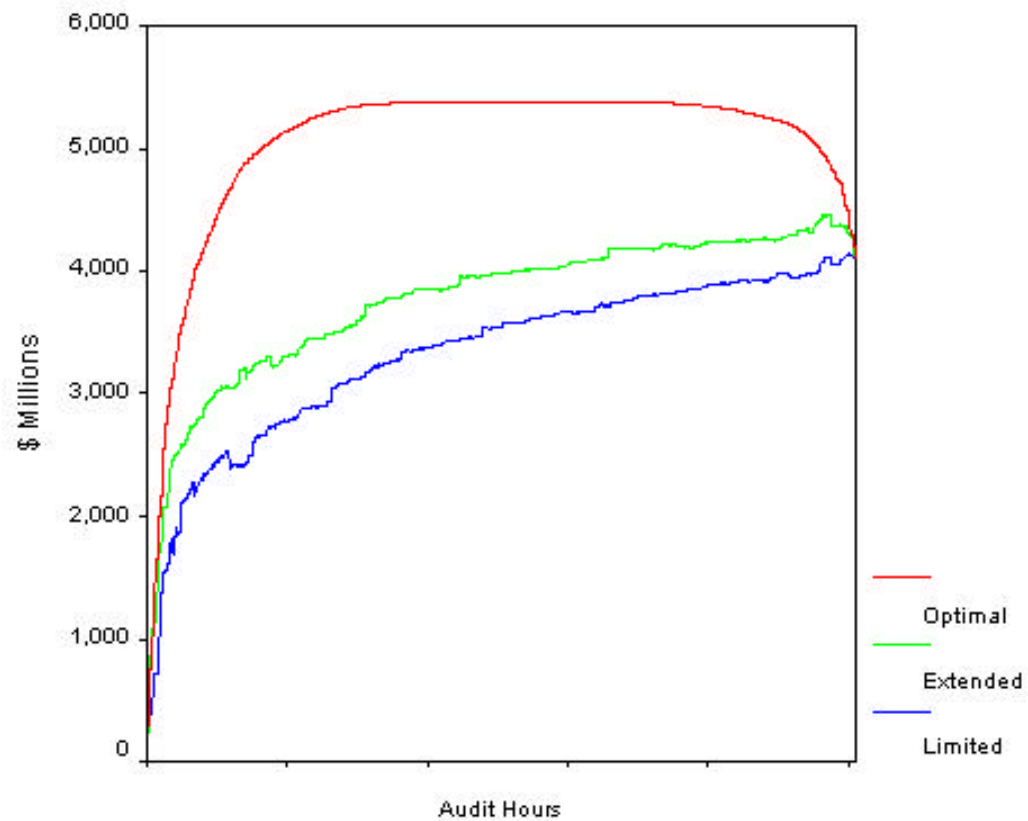
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- Enhanced Ability to Identify Compliance Risk in 1996
- Charts of Cumulative Audit Results By Audit Hours Under Alternative Ranking Criteria
  - Optimal - Based on Actual Audit Results
  - Extended - Based on Extended Data Set
  - Limited - Based on Data Set Currently Used for Compliance Risk and Resource Allocation
- Issue of Generalizability
  - Possible Over-Training of 1996 Data
  - Changing Patterns in the Data Over Time

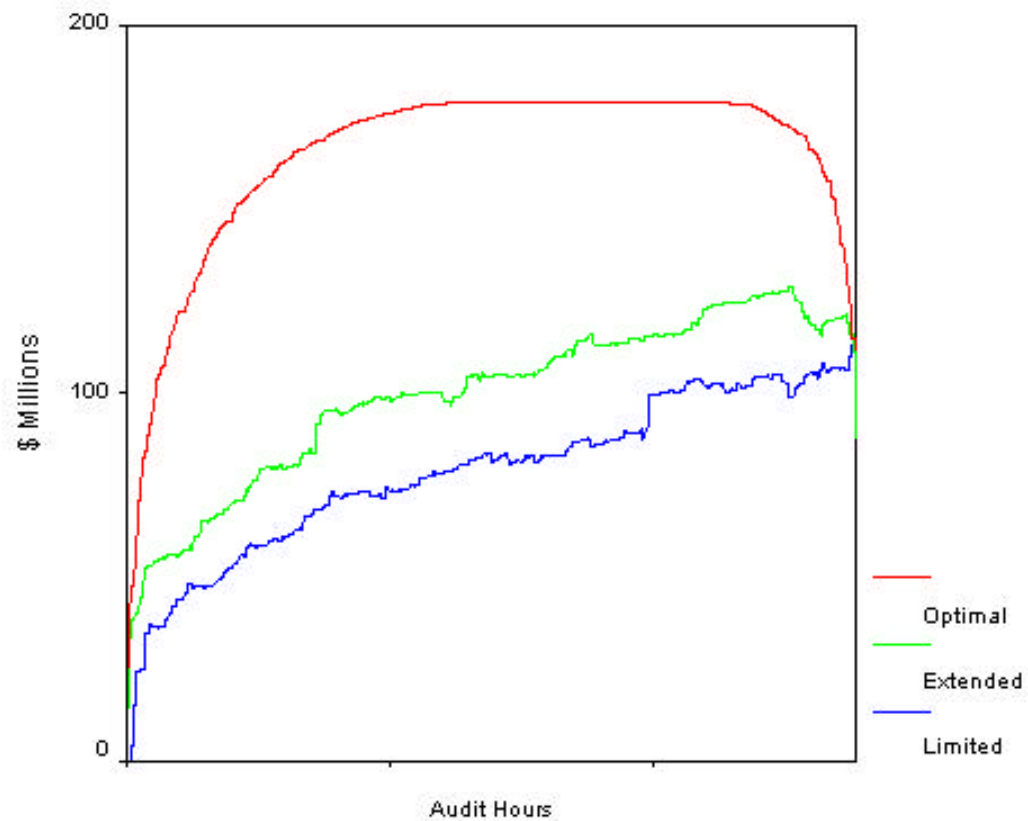
# Cumulative Audit Results (LMSB Companies)



# Cumulative Audit Results (AC 225 Companies)

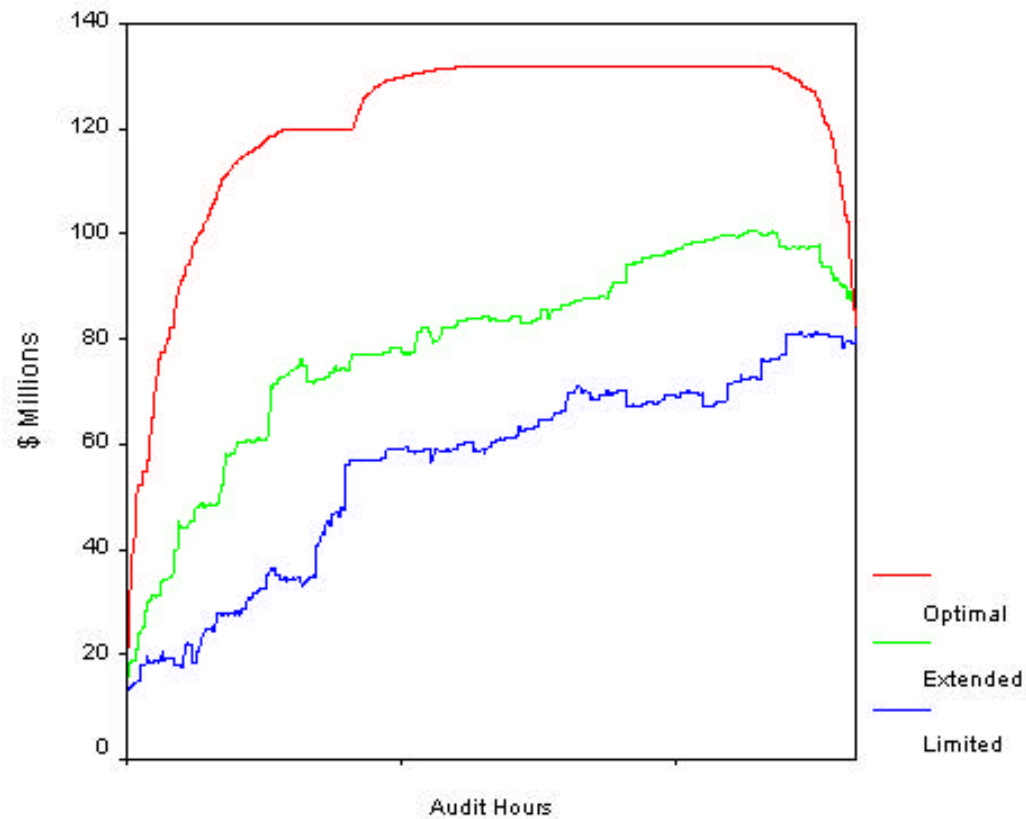


# Cumulative Audit Results (AC 223 Companies)

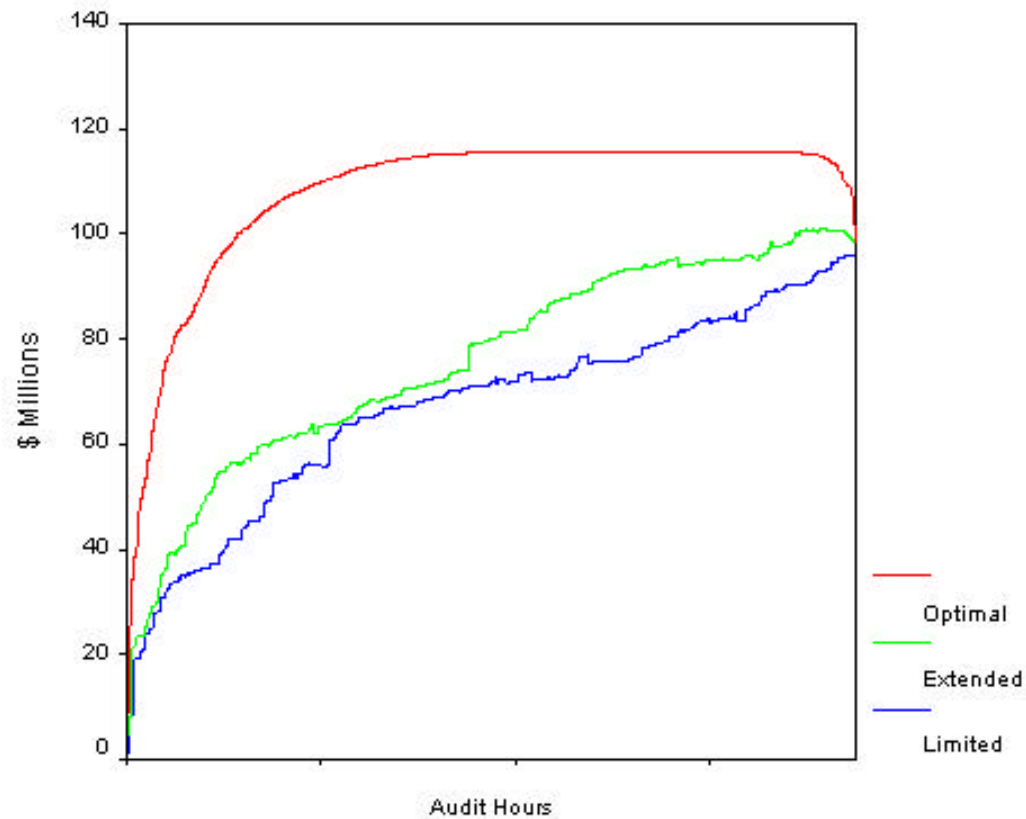




# Cumulative Audit Results (AC 221 Companies)



# Cumulative Audit Results (AC 219 Companies)





# Limitations of Compliance Risk Model

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- Statistical Models
  - Estimated Relationships Based on Historical Data
  - Limited Ability to Control for Structural Differences Across Taxpayers
    - Number, Type and Organizational Structure of Entities that Comprise the Taxpayer
    - Jurisdiction-Specific Rules Governing Entities and Resource Flows Among the Entities
- Simulation Models
  - More Current: Rely on Proxy for Compliance Risk
  - More Detailed: Can Explicitly Account for Structural Differences Across Taxpayers



## Conclusion

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- LMSB Engaged in Major Effort
  - To Improve Measurement of Compliance Risk Among LMSB Taxpayers
  - To Allocate LMSB Resources More Effectively and in a Manner Consistent with Policy Objectives of IRS
- Effort Involves
  - Developing Explicit Mathematical Models of Compliance Risk and Resource Allocation
  - Establishing Business Processes to Promote Continued Improvement and Refinement of Models